The Information Economy as Part of the Information Management Resource Society*

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Abstract. Computer science is an independent branch of social production that changed the economy. The establishment of the integrated information systems, global information networks based on the Internet respectively expanded the possibilities of economic activity and radically changed the content and methods of implementation. The article characterizes the types and distinctive features of economic information and also considers some requirements for economic information. The globalization of the economy based on the free movement of goods in the global market has blurred the boundaries of the national economy and allows to obtain almost instant access to information about any goods. An information resource is a set of accumulated information recorded on a tangible medium in any form, ensuring its transmission through time and space to solve scientific, industrial, managerial, and other tasks. Information Economics holds a special place in the system of information exchange. The use of economic information in society significantly increases the efficiency of processes, reduces the costs of their conduct, but at the same time leads to the emergence of new threats to the functioning of the enterprise. The development of the information society is accompanied by intense modernization of existing firms and the creation of entirely new ones

Keywords: Economic Information, Information Resources, Websites, Services, Electronic Databases

1 Introduction

Today, fuzzy modeling is a promising avenue of research and development. The technology is relevant and in demand because of interest in various aspects of intelligent management.

The learning process in pedagogy is the gradual shift in educational acts necessary to facilitate the development of the student's personality. The transition from an industrial to an information society, the formation, and development of science, engineering, and technology require appropriate clarification and further development of the theoretical foundations and methodological approaches. Nowadays, this stage of development of society has put forward many previously unknown problems. Among them, there was a question of the nature and significance of the information economy and its effects on the formation of the modern information society.

The main component of economic organization is to work with information and application information modes of organization in the management process.

The transformation of information in an independent branch of social production changed the economy. The establishment of the integrated information systems, global information networks based on the Internet respectively expanded the possibilities of economic activity and radically changed the content and methods of implementation.[5]

In the postindustrial economy, the traditional industry based on employment and share in national product gradually gives way to the leading role of the service sector, which is based mainly on the processing of information and production of knowledge. The main area of accumulation and use of capital is increasingly becoming the human capital as the main driving force for the endless nature of information resources (unlike finite natural resources). The greatest situation characterizing the economy of the information society is the competitiveness and prosperity of firms of all sectors depending not only on material resources (the territory occupied, number of buildings and workshops, the performance of machine tools) but the effectiveness of their organization and management, the availability of developed communications and cooperation with clients and partners, the volume of accumulated professional knowledge and skills and opportunities for their intensive use.

The concept of "The Information Economy" as separate and major parts of economic science, emerged in the second half of the twentieth century and was largely due to the achievements of scientific-technical progress and its significant impact on the economy.

The globalization of the economy based on independent movements of goods in the global market has blurred the boundaries of the state of the economy and provides the opportunity to gain almost immediate access to information about any goods. With all this, items of interest to the consumer also ceased to be local products and they are produced and moved around the world. You can talk about the fact that the productive forces have also become dynamic and can be quite easily translated to any area of the world. This causes the rapid growth of competition between producers, no matter where they are [5].

Besides, the information of the concepts reflected in economics is presented in the technology of processing, manufacture, change of conditions, properties, raw materials, products, indicators and results of economic activities, the state of society. Thus, information is presented both objective and subjective one general and scattered, making it

difficult to categorize and identify the dialectical patterns in the evolution of the information economy.

One of the most important types of information – economic information that includes data on labor, material and cash resources, and facilities management for a certain time. It is mainly associated with managing groups of people, production, distribution, exchange, and consumption of material goods and services.

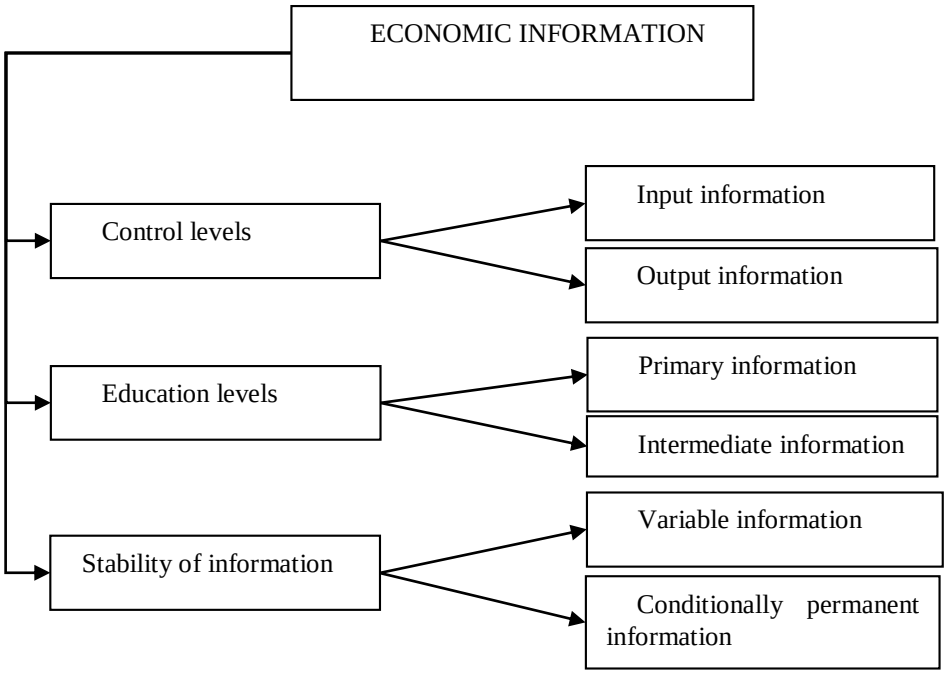

Fig. 1. Classification of economic information.

The information economy is information characterizing the processes of production, distribution, exchange, and consumption of material goods and services. The information acquires the features of economic good and addresses the economy as a resource used in the process of economic activities, as well as the goods (information goods and services). An information resource is a set of accumulated information recorded on a tangible medium in any form, ensuring its transmission through time and space to solve scientific, industrial, managerial, and other tasks. An information resource can exist in the form of books, magazines, files, photographs, reports, diaries, etc.

The characteristic features of economic information:

- Readability. Economic information is a finite set of numeric indicators. The economy operates on standard, planned, actual values of the various indicators that quantify processes and phenomena. This feature of economic data provides the possibility of using computers for processing.

- Cyclicality. Most production processes are characterized by the frequency of occurrence of their constituent stages. Consequently, information on these processes is repeated periodically. This allows you to reuse the machine account, which greatly simplifies the design process of automated data processing.

- Form representation. Economic information is recorded on physical media (paper, machine).

- Volume. Quality management of economic processes is impossible without detailed information about each worker, workplace, process steps, suppliers of raw materials and consumers of finished products, etc. Improving governance is accompanied by an increase in related threads.

- Homogeneity and uniformity. The relative homogeneity and uniformity of economic information enable you to receive the same source data result information for all services and activities.

The economic information requirements are as follows: precision (is a definite perception of economic information by many users), reliability (determines the acceptable level of distortion of both the source and scoring information, which retains the performance of the system), and operational income (determines the speed of the replacement of obsolete over time and lost value of information).

Economic data are reproduced in the system of natural, monetary, and other indicators and classified according to the following criteria. Consider the most important ones.

The functions of the office of economic information are divided into predictive, planned, accounting, regulatory, reference, regulatory, analytical, reporting, and statistical ones

Forward-looking information reflects a probability statement about some future event.

Planned, having a prescriptive, indicating processes or facts that should occur in the planning period.

The account reflects the events and is recorded in the accounting and other documents. In particular, accounting information reflects the actual values of the planned indicators for a certain time.

Regulatory associated with regulation of production costs, billing, and contains rules and regulations, rates, rates, rates, ratios. Designed to determine the stocks of materials and other production components.

Reference for decoding used in the documentation codes.

Regulation - to adjust the planned parameters in the process of functioning of the enterprise.

Analytical - search for control actions on the structural unit.

Reporting and statistical information reflect the results of actual activities of the company for the parent bodies of management, bodies of state statistics, tax authorities, etc., for example, the annual accounting report on the activities of the company.

Classification of economic information across levels of governance (center) includes input and output information.

The input information is information coming into the firm (a structural unit) from outside and used as primary information for the realization of economic and creating completely new ones. Among these processes, the following are quite important:

- mass transfer by people of their information activity and online interactions, the formation of online communities;
- dissemination of the practice of creating network organizations to manage the joint activities of groups of people;
- the introduction of Internet technologies in the functioning of global socio-economic infrastructures, as well as the emergence of a network coordination mechanism;
- the gradual formation of a "new economy", or "network economy". [6]

Principal assumptions and methodology

where a, c are the X coordinates of the points defining the triangle base b is the X coordinate of its vertex. This function is plotted in Fig. 2.

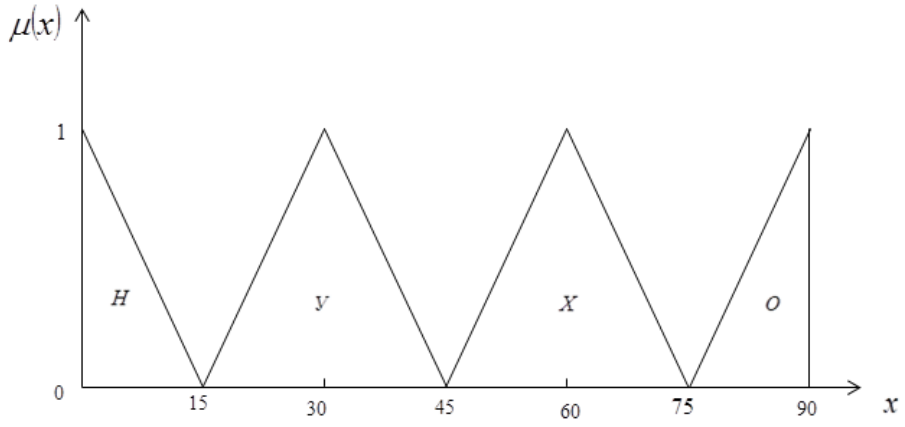

Fig. 2. Membership function plot for input variables LP, LE, EM, CF.

The values of the membership functions for the input linguistic variables are defined as the ratio of the number of each of the Н, У, Х, О answers to the total number of respondents [10]. The obtained values are presented in the table below:

Table 1. Membership function values

Term membership function value	Criterion			
	LP	LE	EM	CF
$\mu(H)$				
$\mu(У)$		0,5	0,4	
$\mu(X)$	0,2	0,5	0,6	0,8
$\mu(O)$	0,8			0,2

2 Conclusion

At the present stage, for the effective operation of industrial enterprises and large companies, corporate information systems (CIS) are used, which allow tracking all functions: production, financial and accounting, marketing, logistics processes in real-time and personnel management; drawing up plans and operational reports on the results of work, comparing the target results with those achieved to achieve the maximum profit of the company, the sustainable functioning of the company as an economic object in the economic information system of the development of society [19].

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